



ILMATIETEEN LAITOS
METEOROLOGISKA INSTITUTET
FINNISH METEOROLOGICAL INSTITUTE

Status of GPS meteorology in Finland

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EUMETNET / EUREF MoU

FMI considers the memorandum generally acceptable. However, the conditions of use listed in Annex 1 are suggested to be clarified.

It is underscored that the data exchanged should not be applied to commercial use of any kind. This holds for both the use of geodetic data by EUMETNET members and the use of meteorological data by EUREF members.



GPS receiver network status

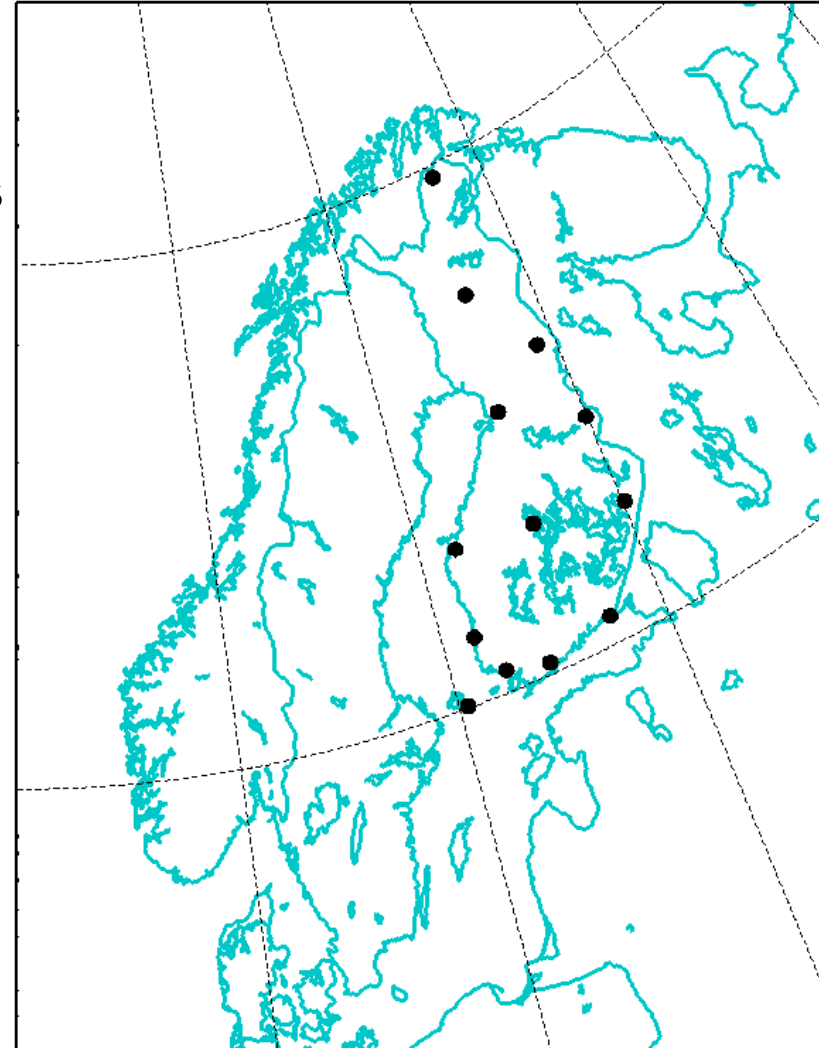
FGI network

Finnish Geodetic Institute (FGI) maintains a network of 13 permanent receiver stations

Four stations (*Joensuu, Metsähovi, Sodankylä, Vaasa*) are included in the EUREF network

The data from the four EUREF stations has been included in geodetic processing at NKGS analysis centre

In addition, data from Sodankylä is processed regularly at GFZ





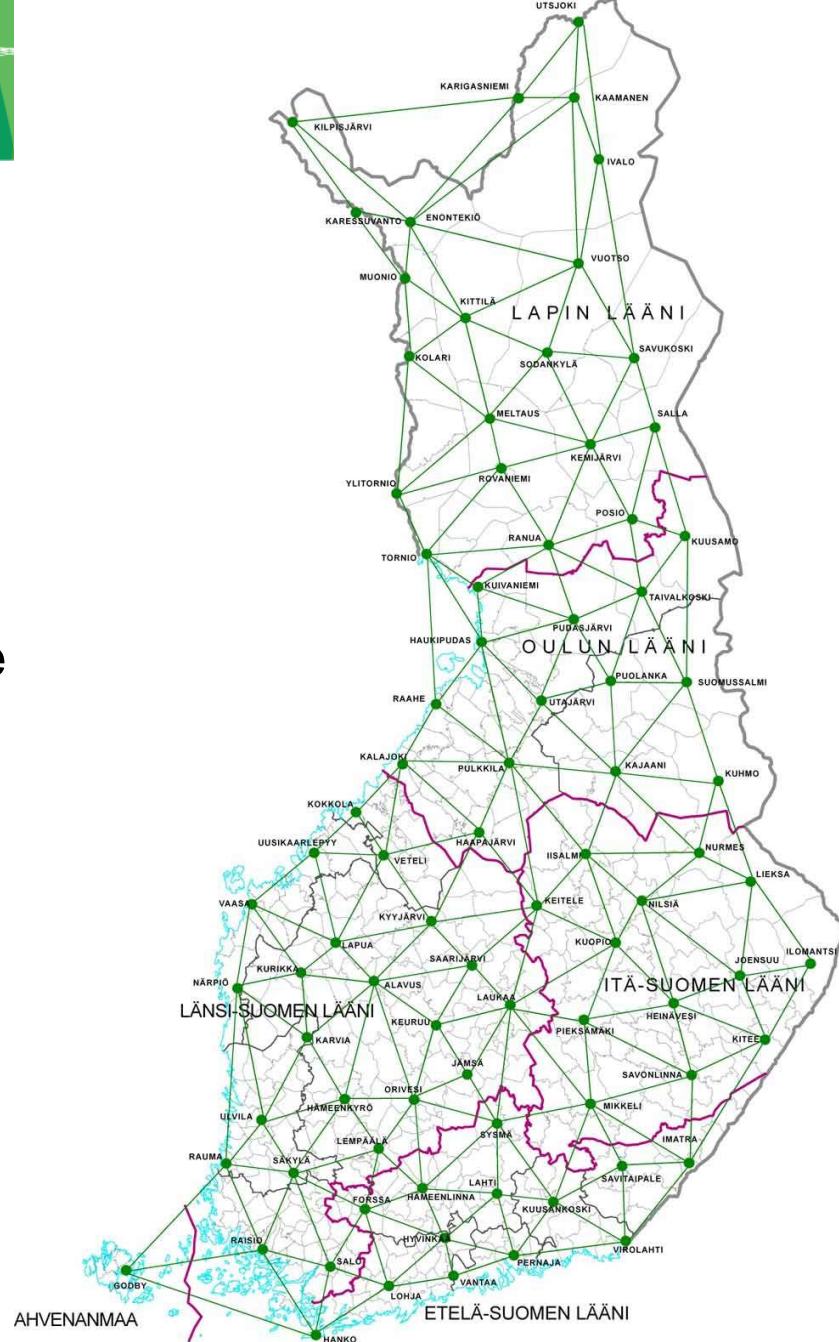
GPS receiver network status

Geotrim network

Geotrim is a commercial company which maintains a network of 86 receivers

No obstacles are seen for inclusion of the Geotrim data in regular NRT processing

The process may be eased in near future through a national research project, in which Geotrim company and FMI are involved





SuomiNET receiver station at FMI

A receiver placed at the roof of FMI building in Helsinki contributes to processing in the SuomiNET network of UCAR (University Corporation for Atmospheric Research, United States)

However, inclusion of this receiver in processing at the European analysis centres is considered unlikely at the moment



Use of GPS meteorology at FMI

Status and views

At the moment, there is only little GPS-meteorological activity at FMI;
however, significant interest exists on operational usage of this data

Development of data assimilation methods for GPS measurements in
the HIRLAM framework will be continued

In future, the GPS measurements are believed to be of operational
significance

- for subjective forecasting based on IWV maps
- for mesoscale analysis – forecast system LAPS (the Local Analysis and Prediction System developed at NOAA)
- for mesoscale data assimilation (AROME framework)